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RANGE EXTENSIONS OF CERTAIN PLANTS ON THE GASPÉ PENINSULA

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At the suggestion of Dr. M. L. Fernald of the Gray Herbarium of Harvard University and Dr. David Potter of Clark University, the author and Mr. Walter H. Hodge of the Massachusetts State College spent the months of June and July, 1934, collecting in the western end of the Shickshock Mountains in Leclerq and Joffre townships, Quebec, Canada.

Since 1920 several parties have collected in the mountains east of the Cap Chat River, but before the author's trip no collecting had been done in the mountains to the west of this area. Dr. Fernald, on trips to Mt. Logan, Mt. Albert and adjacent peaks, found remotely isolated arctic, western and endemic plants, indicating an area which escaped continental glaciation of the Wisconsin period. The purpose of the author's trip was to see if western and endemic plants grew in the Shickshock Range west of the area covered by Dr. Fernald.

Six miles west of the Cap Chat River in Joffre township is the first mountain of any size, Mt. Bayfield (3200 ft.). This peak proved to be a botanical disappointment, since it was wooded to the top, with the typical upland Canadian flora. About five miles west of Mt. Bayfield is Mt. Blanc (3500 ft.), where we were delighted to find several exposed areas near the summit. Here on crumbling cliffs of chloritic schist we found the western, the arctic and the "relic" plants listed below. The rock substance of the cliffs was punky and readily crumbled in the fingers. The top was largely covered by an

¹ Fernald, M. L. Persistence of Plants in Unglaciated Areas of Boreal America. Mem. Am. Acad. xv., no. iii. 1925.

upland meadow with many exposed rocky areas. There were no erratics or glacial markings of any kind. These facts, together with the isolated or "relic" plants found, indicate that Mt. Blanc is another of the Shickshock Mountains with pre-glacial relics.

The range-extensions listed below are chiefly of local interest, the plants already being known from other points on the Peninsula or in neighboring areas of Quebec. One, the Ranunculus, however, has been known in eastern America, south of the arctic regions, only in northern Newfoundland.

Salix anglorum var. kophophylla Schneider. Has been known in Western Newfoundland, and on Mt. Albert in the Gaspé Peninsula. It was found on exposed cliffs of chloritic schist on the southwest summit of Mt. Blanc. No. 92.

Arenaria Macrophylla Hook. Known in the far west from New Mexico to its northern limit in southern British Columbia. It grows in western Massachusetts and Vermont; and on the Gaspé Peninsula at Mont Joie and on Mount Pembroke. This plant was collected by the author on an unnamed peak at the southern end of Lake Matane, on a small exposed area near the summit. No. 114.

Cerastium Beeringianum Cham. & Schlecht. Known in western North America from Arizona to Alaska, in the east from Labrador and Newfoundland, and from the tip of the Gaspé Peninsula along the coast to Bic, also on Mt. Mattaouisse, Mt. Logan and Tabletop Mountain. This plant was collected on the southwest summit of

Mt. Blanc on open cliffs of chloritic schist. No. 119.

Cerastium Fischerianum Seringe. A species chiefly of the North Pacific and Bering Sea region, in the east known from about the Gulf of the St. Lawrence. Formerly collected at Percé, on Bonaventure Island and Cape Rosier on the Gaspé Peninsula, this plant was found on the same cliffs of chloritic schist on the southwest summit of Mt. Blanc. No. 118.

Arabis Holboellii Hornem. Typically of Greenland, reaching its southern limit in eastern North America about the Gulf of the St. Lawrence. Previously found on the Peninsula at Cape Rosier, this plant was collected on an unnamed peak at the southern end of Lake Matane on a small exposed area near the summit. No. 15.

Potentilla emarginata Pursh. A species of Greenland, Arctic America, and northern Labrador, isolated southward in the Shickshock Mountains. Previously found on Mt. Logan and Mt. Mattaouisse, this plant was collected by the author on the southwest summit of Mt. Blanc on exposed cliffs of chloritic schist. No. 179.

Vaccinium ovalifolium Smith. Known in the west from Oregon, Washington and southern British Columbia north to Alaska. Also known from northern Michigan, from Newfoundland and adjacent Labrador. Formerly collected on the Gaspé Peninsula on Tabletop

Mountain, Mt. Albert, Mt. Logan, and Mt. Mattaouisse, found by the author on the southwest summit of Mt. Blanc on exposed cliffs of chloritic schist. No. 250.

Solidago Multiradiata Ait. Known from Labrador, Newfoundland and Hudson Bay, and on the Gaspé Peninsula from Bonaventure Island, Mt. Albert, Tabletop, Mt. Pembroke and Mt. Fortin. It was collected by the author on the southwest summit of Mt. Blanc on exposed cliffs of chloritic schist. No. 350.

Draba nivalis Liljebl. Known from circumpolar regions, Labrador, Newfoundland and on the Gaspé Peninsula from Marten River, Mt. Mattaouisse, Mt. Fortin, and between Mt. Logan and Mt. Pembroke. This plant was found on exposed cliffs of chloritic schist

on the southwest summit of Mt. Blanc. No. 145.

Carex rupestris All. A wide-ranging arctic-alpine species, which has been known on the Gaspé Peninsula from Percé, Tabletop, and Mt. Fortin. This plant was collected on the southwest summit of Mt. Blanc on open cliffs of chloritic schist. No. 401.

Carex Vahlii Schkuhr. A widely dispersed arctic-alpine species, which has been found on the Gaspé Peninsula only on Mt. Mattaouisse. It was collected on cliffs of chloritic schist on the southwest summit

of Mt. Blanc. No. 400.

Ranunculus pedatifidus J. E. Smith var. Leiocarpus (Trautv.) Fernald. An arctic species known southward to the mountains of northern Labrador and isolated in northern Newfoundland. This is the only record of the plant on the Gaspé Peninsula, collected on the southwest summit of Mt. Blanc on exposed cliffs of chloritic schist. No. 137.

There are many peaks about Lake Matane and in the Cap Chat valley from which we have no records of plants collected. Of these areas Mt. Frère de Nicolabert, with its exposed peak, should prove to be of interest, but whatever rare species it harbors only future trips can tell.

Specimens of the plants listed above have been deposited in the Herbarium of Clark University and in the Gray Herbarium of Harvard University.

The author is deeply indebted to Dr. David Potter for his generous advice and assistance and to Dr. M. L. Fernald for his aid in checking the entire collection.

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